

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1-15 (Canceled)

1 16. (Currently amended) A dental data input system comprising:

2 a handle, ~~said handle being generally cylindrical, the diameter of said~~
3 ~~handle being much smaller than the length of said handle, said handle being~~
4 ~~configured to be held between the thumb and first and second fingers of a~~
5 ~~dental examiner's hand;~~

6 a discoid head rigidly attached to a first end of said handle, said head
7 including a data input device, said head being configured to be generally flat
8 and thin with a largest dimension of approximately 2.5 centimeters, said
9 discoid head having first and second parallel flat surfaces on opposite sides
10 of said head and a circumferential surface; and

11 an intraoral data input tool including:

12 a rigid pan having a bottom surface and a side wall around the
13 periphery of said bottom surface;

14 a handle rigidly attached to said side wall of said pan;

15 a circuit board positioned within said pan, said circuit board
16 including a data input device;
17 a mirror positioned centrally within said pan;
18 a cover positioned over said circuit board, said cover being
19 configured to hermetically seal said circuit board within said pan; and
20 a stylus;
21 wherein said data input device is responsive to force applied by said
22 stylus, and said intraoral data input tool is configured to allow a dental
23 examiner to input data using said stylus on said data input device when said
24 data input device is comfortably positioned at least partially within a patient's
25 ~~mouth, and said handle is rigidly attached to said circumferential surface.~~

1 17. (Original) A dental data input system as in claim 16 wherein said stylus
2 is a dental probe.

1 18. (Original) A dental data input system as in claim 16 further comprising a
2 controller with an operating program, said controller being linked to said
3 intraoral data input tool by a communication means.

1 19. (Original) A dental data input system as in claim 18 wherein said
2 communication means comprises an electrical cable.

1 20. (Original) A dental data input system as in claim 18 wherein said
2 communication means is a wireless communication means.

1 21. (Original) A dental data input system as in claim 18 wherein said
2 operating program includes a routine for periodontal examination.

1 22. (Original) A dental data input system as in claim 18 wherein said
2 operating program includes a routine for dental charting.

1 23. (Original) A dental data input system as in claim 18 further comprising:
2 a display electrically connected to said controller; and
3 a keyboard electrically connected to said controller.

1 24. (Original) A dental data input system as in claim 18 further comprising a
2 voice synthesizer electrically connected to said controller.

1 25. (Original) A dental data input system as in claim 18 further comprising
2 an auxiliary input device electrically connected to said controller.

26-49 (Canceled)

1 50. (Previously presented) A dental data input system as in claim 17 wherein
2 said stylus includes a graduated end for periodontal probing.

1 51. (Previously presented) A dental data input system as in claim 50 wherein
2 said stylus includes a knee adjacent to said graduated end, said stylus being
3 configured to allow data input with said knee.

1 52. (Previously presented) A dental data input system as in claim 17 wherein
2 said stylus includes a graduated end configured for periodontal probing and a
3 second end configured for use in data input.

1 53. (Previously presented) An intraoral data input tool for use during dental
2 examination of a patient, said tool comprising:
3 a rigid pan having a bottom surface and a side wall around the
4 periphery of said bottom surface;
5 a handle rigidly attached to said side wall of said pan;
6 a circuit board positioned within said pan, said circuit board including
7 push buttons and a display;
8 a mirror positioned centrally within said pan; and
9 a cover positioned over said circuit board, said cover being configured
10 to hermetically seal said circuit board within said pan;
11 wherein said push buttons are responsive to force applied by a stylus,
12 and wherein said intraoral data input tool is configured to allow a dental
13 examiner to input data using said stylus when said pan is comfortably
14 positioned at least partially within said patient's mouth.

1 54. (Previously presented) The intraoral data input tool of claim 53 further
2 comprising a platform with push buttons, said platform being rigidly attached
3 to said tool at the position where said handle is attached to said side wall of
4 said pan.

1 55. (Previously presented) The intraoral data input tool of claim 53 wherein
2 said circuit board has a central cutout, said mirror is positioned within said
3 central cutout of said circuit board, said cover is positioned over said mirror
4 and said circuit board, and said cover is configured to hermetically seal said
5 circuit board and said mirror within said pan.

1 56. (Previously presented) The intraoral data input tool of claim 53 wherein
2 said mirror is positioned over said circuit board and said mirror has apertures
3 for said push buttons and said display, said cover is a gasket positioned
4 between said circuit board and said mirror, said gasket hermetically sealing
5 all of said apertures in said mirror and hermetically sealing said mirror to the
6 periphery of said pan.

1 57. (New) An intraoral data input tool of claim 53 wherein said handle is
2 generally cylindrical, the diameter of said handle being much smaller than the
3 length of said handle.

1 58. (New) An intraoral data input tool of claim 53 wherein said rigid pan is
2 discoid.

1 59. (New) An intraoral data input tool of claim 58 wherein said discoid
2 rigid pan has a diameter of approximately 2.5 centimeters.

1 60. (New) The intraoral data input tool of claim 53 further comprising an
2 extrusion rigidly attached to the perimeter of said rigid pan, positioned
3 diametrically opposite to said handle, said extrusion extending radially from
4 said rigid pan, said extrusion being configured to allow said dental examiner
5 to place one or more fingers of said examiner's stylus bearing hand against
6 said extrusion to provide extra stability when inputting data with said stylus.

1 61. (New) The intraoral data input tool of claim 53 wherein each of said
2 push buttons has a top surface area in the range of 1 to 2 square millimeters.

1 62. (New) The intraoral data input tool of claim 53 wherein said circuit board
2 further includes a touch sensitive display.

1 63. (New) The intraoral data input tool of claim 53 wherein said push
2 buttons are located peripherally about said mirror.

1 64. (New) The intraoral data input tool of claim 53 wherein said display is a
2 touch sensitive display.

1 65. (New) The intraoral data input tool of claim 53 further comprising a
2 translucent disposable cover.

1 66. (New) The intraoral data input tool of claim 65 further comprising a
2 clamp configured to keep said disposable cover conformal with the surface of
3 said mirror.

1 67. (New) The intraoral data input tool of claim 66 wherein said clamp is a c-
2 clamp and said rigid pan is discoid with a concave side wall, said concave
3 side wall retaining said c-clamp.

1 68. (New) The intraoral data input tool of claim 53 further comprising a
2 wireless communication device contained within said handle, said
3 communication device being electrically connected to said circuit board.

1 69. (New) The intraoral data input tool of claim 53 further comprising:
2 an electrical connector attached to the opposite end of said
3 handle from said rigid pan; and
4 an electrical cable connecting said electrical connector to said
5 circuit board.

1 70. (New) The intraoral data input tool of claim 53 wherein said stylus is a
2 dental probe.

1 71. (New) The intraoral data input tool of claim 53 wherein the length of said
2 handle is approximately 13 centimeters.

1 72. (New) The intraoral data input tool of claim 53 wherein the diameter of
2 said handle is smaller than the length of said handle, the rigid pan is discoid
3 and has a flat bottom surface, and the long axis of said handle is in a plane
4 containing a diameter of said discoid pan.

1 73. (New) The intraoral data input tool of claim 72 wherein said plane is
2 perpendicular to said flat bottom surface of said rigid pan.

1 74. (New) An intraoral data input tool for use during dental examination of a
2 patient, said tool comprising:

3 a rigid pan having a bottom surface and a side wall around the
4 periphery of said bottom surface;

5 a handle rigidly attached to said side wall of said pan;

6 a circuit board positioned within said pan, said circuit board including
7 push buttons, a display, and a touch sensitive display; and

8 a cover positioned over said circuit board, said cover being configured
9 to hermetically seal said circuit board within said pan;

10 wherein said push buttons and said touch sensitive display are
11 responsive to force applied by a stylus, and wherein said intraoral data input
12 tool is configured to allow a dental examiner to input data using said stylus
13 when said pan is comfortably positioned at least partially within said patient's
14 mouth.

1 75. (New) The intraoral data input tool of claim 74 wherein said bottom
2 surface of said rigid pan includes a mirror.

1 76. (New) The intraoral data input tool of claim 75 wherein the diameter of
2 said handle is smaller than the length of said handle, the rigid pan is discoid
3 and has a flat bottom surface, and the long axis of said handle is in a plane
4 parallel to the plane containing the flat bottom surface of said discoid pan.

1 77. (New) The intraoral data input tool of claim 74 wherein the diameter of
2 said handle is smaller than the length of said handle, the rigid pan is discoid
3 and has a flat bottom surface, and the long axis of said handle is in a plane
4 containing a diameter of said discoid pan.

1 78. (New) The intraoral data input tool of claim 74 wherein said touch
2 sensitive display covers most of the top surface of the head of said intraoral
3 data input tool.

1 79. (New) The intraoral data input tool of claim 78 wherein said touch
2 sensitive display has a mirror-like surface.